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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-------------|----------------------|---------------------|------------------|
| 09/841,255 | 04/24/2001 | Nobuyuki Kambe | 2950.01US02 | 6755 |
| 62274 | 7590 | 10/02/2006 | EXAMINER | |
| DARDI & ASSOCIATES, PLLC | | | | KOSLOW, CAROL M |
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| | | | | ART UNIT |
| | | | | PAPER NUMBER |
| | | | | 1755 |

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/841,255 | KAMBE ET AL. |
| | Examiner | Art Unit |
| | C. Melissa Koslow | 1755 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 September 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3,6-9,12-15,23-28,30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) 1-3,9,12-15,23 and 24 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 6-8,25 and 26 is/are rejected.
- 7) Claim(s) 27, 28, 30 and 31 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/18/06.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1 September 2006 has been entered.

The obviousness double patenting rejections over claims 1, 6, 15, 26, 29 and 31 are withdrawn due to applicant's amendment to application 09/433,202. The art rejections over claims 26-31 are withdrawn due to the amendments to the claimed. Applicant's arguments with respect to the remaining obviousness-type double patent rejections and art rejections have been fully considered but they are not persuasive.

The English translation of the second office action cited in the information disclosure statement filed 18 September 2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

JP 62-121,643 and EP 395925 have been considered with respect to the provided English abstracts. JP 08-3540 has been considered with respect to the provided English translation.

JP 58-53988; JP 2-219889; JP 3-80106; JP 5-345611; JP 7-41745 and JP 9-193004 have lines drawn through them since their cited EP English equivalents have been considered. Applicants are reminded that one member of a patent family need be considered.

The indicated allowability of claims 1-3, 9, 12-15, 23 and 24 are withdrawn due to applicants' amendment to these claims.

Newly amended claims 1-3, 9, 12-15, 23 and 24 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The newly claimed dispersion and original claimed polishing composition are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a dispersion of magnetic particles, pigments, inorganic lubricants and/or abrasives which are added to magnetic recording medium compositions, to paints or to inks and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case.

In addition, the newly claimed particle dispersion are not limited to the composition implied by “polishing composition” in terms of the amount of particles.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1-3, 9, 12-15, 23 and 24 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim 26 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled

in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The previously amended range of ‘from about 5 nm to about 45 nm’ is new matter since there is no explicit teaching of “about 45” in the specification.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 25 is provisionally rejected on the ground of rejected nonstatutory obviousness-type double patenting as being unpatentable over claim 9 of copending Application No. 09/136,483. Although the conflicting claims are not identical, they are not patentably distinct from each other because the polishing composition of claim 9 in Application No. 09/136,483 means it would have been obvious to smooth a surface by polishing the surface using the polishing composition of claim 9 in Application No. 09/136,483.

Art Unit: 1755

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants' comments with respect to the proposed amendment in 09/136,483 are noted. This proposed amendment of canceling claim 9 was not entered and thus claim 9 is still pending in 09/136,483. The rejection is maintained.

Claim 25 is provisionally rejected on the ground of rejected nonstatutory obviousness-type double patenting as being unpatentable over claim 58 of copending Application No. 09/433,202. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed polishing method in copending Application No. 09/433,202 suggests the method claimed in this application since the dispersion used in the claimed polishing method in copending Application No. 09/433,202 can be non-silicon metal compound, i.e. ceria or titania, having a particle size and distribution that encompasses the size and distribution claimed in this application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants' argument that obviousness-double patenting rejection made over later filed application is not appropriate is noted. They do not overcome the rejection. Applicant's argument that the new claims in application 09/433,202 are not obvious over claim 25 in this application fails to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the claims in the co-pending application. The rejection is maintained.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 6-8 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 5,389,194 or are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent 5,626,715.

These references teach a method of smoothing a surface by polishing the surface using a polishing slurry in combination with a rotating polishing pad, which is a type of mechanical polisher. The taught polishing slurry is an dispersion of alumina abrasive particles in an aqueous solution. The taught alumina particles have a preferred average particle size in the range of 10-40 nm, which falls within the claimed range, and a size distribution about the average particle size in the range of 10%, 20%, or 30%. Thus the references teach all the particles fall within 10% of the average particle size and 110% of the average particle size; within 20% of the average particle size and 120% of the average particle size and within 30% of the average particle size and 130% of the average particle size. These ranges fall within that of claim 6. It is clear that none of the particles in these ranges will be 5 times of average particle size, as shown by the following calculation. Choosing an average particle size of 40, the size distributions which are 10%, 20% and 30% about the average particle size are respectively, 36-44 nm, 32-48 nm and 28-52 nm. Choosing an average particle size of 30, the size distributions which are 10%, 20% and 30% about the average particle size are respectively, 27-33 nm, 24-36 nm and 21-39 nm. Choosing an average particle size of 20, the size distributions which are 10%, 20% and 30% about the average particle size are respectively, 18-22 nm, 16-24 nm and 14-26 nm. Choosing an

average particle size of 10, the size distributions which are 10%, 20% and 30% about the average particle size are respectively, 9-11 nm, 8-12 nm and 7-13 nm.

Example 3 in both references teaches a polishing slurry comprising alumina particles. The taught alumina particles have an average particle size of 10 nm (X of the example) and a distribution about the average particle size of 10% (P in the example) which means all the particles in the slurry are within the range of 10% of the average particle size and 110% of the average particle size or are within the range of 9-11 nm, where Y is 1 nm ('715:claims 3 and 14). This range falls within size range of claim 6 and shows no particles have a size 5 times the average particle size, which would be 50 nm. The references clearly teach the claimed process.

Applicants argue the Examiner is giving meanings to X and Y not found in the text of the references. This is incorrect since example 3 clearly states "X=10 nm" and "Y=10%" and claims 3 and 14 in '715 clearly states "P=10% wherein y=1 nm". Applicants argue that the references do not clearly state in any way that all their particles are within a certain cutoff value. This is incorrect since the reference clearly states in claim 10 in '194 and claim 1 of '715 that the particles have a size distribution Y. Size distribution is a synonym for applicants' "distribution of diameters". Thus the references do teach a certain cutoff value. Thus these arguments do not overcome the rejection.

The declaration by Dr. Kambe filed under 37 CFR 1.132 is insufficient to overcome the rejection because it amounts to an affirmation that the affiant has never seen the claimed subject matter before. This is not relevant to the issue of anticipation or nonobviousness of the claimed subject matter and provides no objective evidence thereof. See MPEP § 716. Accordingly, it does not overcome the rejection.

Art Unit: 1755

Applicants comments with respect to Dr. Singh's declaration are noted but do not overcome the rejection for the reasons given in the office action of 6 February 2006. Applicants have not presented any evidence showing the Examiner is incorrect in her rebuttals. Claims 1-3 and 13-14 in '715 and claim 10 in '194 show that Q, the term which has the argued inconsistencies, does not detract from the rest of teachings of references and make the references so unclear one of ordinary skill in the art could not what is taught in the references.

Claim 26 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112, first paragraph, set forth in this Office action.

Claims 27, 28 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable once claim 26 has been rewritten or amended to overcome the rejection under 35 U.S.C. 112, first paragraph, set forth in this Office action.

Claim 31 is objected to as referring to and encompassing the subject matter of a rejected base claim, but would be allowable once claim 26 has been rewritten or amended to overcome the rejection under 35 U.S.C. 112, first paragraph, set forth in this Office action.

There is no teaching or suggestion in the cited prior art of record of a polishing composition comprising a dispersion of particles which comprising SiC with an average particle size from about 5 nm to about 50 nm. The closest art of record is the parent application, which applicant has filed a terminal disclaimer over, which claims a polishing composition comprising a dispersion of particles which comprising SiC with an average particle size from about 5 nm to about 50 nm.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

Art Unit: 1755

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk
September 29, 2006

C. Melissa Koslow
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